FORBES STATE FOREST DISTRICT

2023 ACTIVITY PLAN

The mission of DCNR Bureau of Forestry is to conserve the long-term health, viability, and productivity of the Commonwealth's forest and to conserve native wild plants. One of the ways the bureau carries out this mission is through the State Forest Resource Management Plan (SFRMP), a document that guides the management of the 2.2 million-acre state forest system. The SFRMP is updated approximately every 5 years and includes an extensive public engagement process.

One of the policies in the bureau's strategic plan (Penn's Woods: Sustaining Our Forests) includes, "Public participation will be an integral part of the management of state forest lands." The purpose of this Activity Plan is to communicate to the public about upcoming management activities, projects, and events that will be conducted to implement the SFRMP on Forbes State Forest. This document will be revised at the start and middle of each calendar year to provide sufficient time for public review, questions, and feedback. The bureau is committed to considering the views and perspectives of the public and stakeholders and strives to accommodate public interests in planning management activities and decision making. We encourage comments or questions regarding planned or proposed activities be directed to the state forest district conducting the activity.

For questions, comments, or more information about this plan, please contact:

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RECREATION

Some of the recreation-related improvement projects scheduled to be completed this year are listed below.

Trail Projects

- At least 1/3rd of trails in District are brushed back and re-blazed
- Clear downed trees from all trails in District as necessary
- Groom Snowmobile Trails
- Install Tunnel Road snowmobile bypass along powerline
- Improve Gary's Run Connector trailhead at Pletcher Road intersection
- Continue to surface Quebec Road with 2A stone
- Replace bridge railings on three bridges on Mountain Streams Trail
- Divert water from Linn Run Road away from Fish Run Trail
- Resurface Black Bear Trail between JE Miller Rd. and Beam Rocks
- Fix washed out section of Pollinator Loop Trail at District Office
- Remove washed out bridge on Grove Run Trail and install new crossing
- Resurface 300 feet of Spruce Run Trail, Between Laurel Summit Road and Towhee Trail
- Resurface Wolf Rocks Trail near campsite #1
- Remove pipe on Loop Trail
- Look at wet areas on Interstate Trail and determine if pipes are needed

Other Maintenance Projects

- Check for/remove hazardous trees/limbs at Motorized Camp Sites
- Check for/remove hazardous trees/limbs at State Forest Picnic Areas
- Maintain and paint 1/5 of boundary line in District
- RFP for interpretive panels at Mt Davis
- Continue work to bring State Forest signs into compliance with Sign Manual
- Install Double-V Kiosk at Beam Rocks parking area
- Add aggregate to campsite #6
- Surface road from Sheepskin Trail to Lick Hollow lower gate with aggregate

Organized Events

The Forbes State Forest authorizes many organized events throughout the course of the year through Commercial Activity Agreements, Special Activity Agreements or Letters of Authorization depending on the request. A sample of these agreements are listed below.

- Commercial Activities Agreements (Seven Springs, True North, etc.)
- Special Activities Agreements/LOA's (Summer's Best Two Weeks, US Army LandNav at Quebec Run, Rolling Ridge Snowmobile Club, Presbyterian Church, Center Church, Boyce Middle School, Penn Trafford School District, Derry Middle School, North Star School District, various weddings, Scout groups, etc.)

TIMBER MANAGEMENT

Timber management will include stands identified in the landscape exam process as high priority for treatment due to high levels of natural regeneration, stand health issues, and prior and ongoing regeneration projects.

Marked and sold, potentially active:

- The 116-acre Panhandle Removal timber sale in the Laurel Mt Division south of Hall Springs Road with sale blocks east and west of Beam Road was marked to remove the overstory trees. Some of this sale area was cut several years ago with an improvement cut to favor the healthiest trees and some of the area was cut with a shelterwood treatment to remove some of the trees to allow sunlight to stimulate regeneration on the forest floor, favoring oak seedlings.
- The 89-acre Hickory Flats Removal timber sale in the Laurel Mt Division is eight tenths of a mile south from the intersection of Hickory Flats Road and Marshall Fields Trail along Hickory Flats Road. An additional timber sale block is located a third of a mile west of Hickory Flats Road and Marshall Fields Trail just south of Marshall Fields Trail. This timber sale was marked to remove overstory trees within two deer fences to allow regeneration space to grow into the next forest stand. Some of this sale area was previously treated with a shelterwood treatment to initiate seedling growth and fenced to protect the growing seedlings from deer browsing. The fenced block along Hickory Flats Road was removed in 2019.
- The 128-acre Shepherd Road Removal timber sale in the Braddock Division about a half mile southeast of the intersection of Shepherd Road and Skyline Drive along Shepherd Road was marked to remove the overstory trees to allow regeneration space to grow into the next forest stand to include tulip poplars, red oaks, and red and sugar maples. This sale area was previously treated in 2010 with a shelterwood treatment (Timbe sale #04-2006BC01) to initiate seedling growth and most of the shelterwood area was fenced in 2007 to protect the growing seedlings from deer browsing. The fences were removed in 2019.
- The 70-acre American Toad Removal timber sale in the Blue Hole Division on the east side of Glade Road about one mile south of Pritts Distillery Road/Glad Road intersection was marked to

remove overstory trees to allow regeneration space to grow into the next forest stand to favor oak. This sale area was previously treated with an improvement harvest (Timber sale #04-2001BC09) in 2004 to improve the health and growth of the best mature trees. The harvest area was then enclosed with a deer fence in 2006 to prevent deer from eating desirable seedling growth. The fenced portion of the harvest was treated with a prescribed fire in May of 2012 to stimulate oak seedling growth. The deer fence was removed in 2019.

- The 121-acre Singing Veery Removal timber sale in the Blue Hole Division south of the Laurel Highlands Hiking Trail shelter area and west of Blue Hole Creek and east of Gary's Run was marked to remove overstory trees to allow regeneration space to grow into the next forest stand to favor oak. This sale area was previously treated with a shelterwood treatment in 2005 (Timber sale #04-2002BC05) to initiate seedling growth and some of the sale blocks were fenced to protect the growing seedlings from deer browsing in 2006. The fence was removed in 2015.
- The 46-acre Lick Hollow Removal timber sale in the Braddock Division south of the Lick Hollow Picnic Area between a tributary to Lick Run and Lick Run was marked to remove the overstory trees in a previous 46-acre shelterwood treatment (Timber sale #04-2005BC07) cut in 2008 to allow developing seedlings space to grow into the next forest stand. Many of the grapevines growing and choking mature trees were killed in 2006 (Regeneration project 040520). The sale area was fenced in 2006 to protect growing seedlings from deer browsing after the shelterwood treatment. The fence was removed in 2020. 10 acres of this sale was treated in 2020 (Regeneration project 041911) with herbicide to kill multiflora rose, Japanese barberry, spicebush, and fern from the understory.

Marked but not yet sold:

- The 89-acre Green Giant Removal timber sale in the Kooser Division north of Laurel Hill State Park and Beltz Road near the intersection of Red Oak Trail and Beltz Road was marked to remove the overstory trees to allow regeneration space to grow into the next forest stand to include tulip poplars, red oaks, red maples, and sugar maples. Blocks 2 and 3 received a shelterwood harvest (Timber sale #04-2002BC07) to initiate seedling growth and were fenced in 2006 to protect the growing seedlings from deer browsing. The fence was removed in 2019. The western half of this timber sale was treated with herbicide in 2009 (Regeneration project 040834) to remove competing vegetation (hay scented fern, New York fern) in the understory to help desirable regeneration become established. Blocks 4, 5, and part of 15 received a selection harvest in 1975 and 1978.
- The 204-acre Canaan Church Removal timber sale in the Braddock Division east of Canaan Church Road and south of a large 500 kV power line right of way and just east of the intersection of Rt. 381 and Canaan Church Road is being marked to remove the overstory trees in a previous 128-acre shelterwood treatment (Timber sale #04-2009BC04) cut in 2011 to allow developing

- seedlings space to grow into the next forest stand. An area north of the previous 128-acre shelterwood was added to this timber sale to bring the total to 204 acres.
- The 162-acre Grindle Ridge Removal timber sale in the Blue Hole Division north of Grindle Ridge Road and south of Blue Hole Road just west of the intersection of Grindle Ridge Road and Blue Hole Road is being marked to remove the overstory trees in a previous 158-acre shelterwood treatment (Timber sale #04-2007BC01) cut in 2011 to allow developing seedlings space to grow into the next forest stand.
- The 149-acre Bathtub Removal timber sale in the Laurel Mt. Division south of Weaver Road just west of the intersection of Weaver Road and Rock Run Road is being marked to remove the overstory trees in a previous 52-acre shelterwood treatment (Timber sale #04-2003BC04) cut in 2005 and herbicided in 2006 (Regeneration project 040509) to remove competing vegetation (hay scented fern, New York fern) in the understory to help desirable regeneration become established and fenced in 2006 to protect the growing seedlings from deer browsing which stands to this day. A 97-acre area was added to this timber sale that has black cherry trees showing signs of decline which will only get worse over time and may potentially lead to tree mortality in the future. We hope to initiate a new healthier stand by removing the declining black cherry trees. This area was herbicided in 2022 (Regeneration project 042104) to remove competing vegetation (hay scented fern, New York fern, striped maple, and black birch) in the understory to help desirable regeneration become established.

Proposed (not marked yet):

Stuckslager, Apple Hill, and Owl Lodge timber sale proposals are currently being drafted.

Regeneration Projects:

Regeneration projects are planned in order to address issues and problems that impede the development of desirable regeneration in areas we want to eventually begin to grow new seedlings in conjunction with future timber sales:

- Herbicide a 42-acre area in the Braddock Division southeast of the intersection of Wharton
 Furnace Road and Fayette Springs Road to kill the multiflora rose, Japanese barberry, spicebush,
 and fern in the understory prior to a shelterwood harvest to initiate desirable tree seedling
 growth.
- Herbicide a 79-acre area in the Braddock Division around the Braddock Division maintenance headquarters on Skyline Drive to kill grasses and fern in the understory in a previous shelterwood harvest in 2018 to help initiate desirable tree seedling growth.

- Herbicide a 68-acre area in the Braddock Division east of the intersection of Shepherd Road and Camp Whyel Road to kill fern and grasses in the understory prior to a shelterwood harvest to initiate desirable tree seedling growth.
- Herbicide a 21-acre area in the Braddock Division east of the intersection of Shepherd Road and Camp Whyel Road to kill Japanese barberry, multiflora rose, spicebush, and fern prior to a shelterwood harvest to initiate desirable tree seedling growth along with killing mile-a-minute weed which is a highly invasive plant that is spreading along the power line right-of-way.

RESTORATION AND HABITAT PROJECTS

- Continue to monitor the health of the mature trees and recently planted balled and burlap trees in the Mt. Davis State Forest Picnic Area and Lick Hollow State Forest Picnic Area and remove unhealthy trees when necessary. Trees in the picnic areas beautify the landscape and provide shade for picnic area users.
- Continue to work with the Pennsylvania Fish and Boat Commission to daylight timber
 rattlesnake gestation sites on state forest land where pregnant female timber rattlesnakes must
 bask in the sun to give birth to healthy young rattlesnakes. These sites require regular
 maintenance to clear tree and shrub growth that would shade this critical rattlesnake habitat.
 We aid the PFBC with cutting and herbiciding unwanted vegetation.
- Work with state park staff to prepare and plant ten acres of native wildflowers to improve
 pollinator habitat in an opening on Laurel Ridge State Park along the east side of Fire Tower
 Road just north of Koring Trail.
- Plant an acre of native wildflowers to improve pollinator habitat in a forest opening on state forest land. Final location has yet to be determined.
- Work with Department of Environmental Protection (DEP) on the discoloration/staining in Blue Hole Creek discovered near the end of 2021. Water samples are being analyzed and the source causing the discoloration is being investigated.
- Monitor a recently completed Large Woody Material (LWM) in-stream habitat improvement project for a portion of a 6,739 ft section of Camp Run starting at the intersection of Camp Run and Indian Creek and going east to the State Forest boundary east of Mt. Streams Trail. Camp Run is an Exceptional Value (EV) and Class A Trout stream that supports a population of wild trout of size/abundance to support a long-term and rewarding sport fishery and is a PFBC 'Priority 1' stream for habitat improvement. The project goal was to restore the natural ecological conditions of both the riparian and aquatic communities of Camp Run by restoring the large woody material component to the stream. This project improved stream habitat, riparian vegetation development, and helped restore the hydrology by assisting the connection of the stream to the floodplain. The woody material creates a diversity of habitats within the stream. Carefully selected trees were cut along stream bank into the waterway to improve

- aquatic life with a target of four 'structures' of multiple pieces of LWM per 100 ft of stream length. This project was completed from Jan. 1st to Sept. 30th.
- Conduct a Large Woody Material (LWM) in-stream habitat improvement project for a portion of a 11,475 ft section of Jones Mill Run starting at Koring Trail and going south to the State Forest boundary. Jones Mill Run is an Exceptional Value (EV) and seasonally trout stocked stream and is a PFBC 'Priority 2' stream for habitat improvement. The project goal is to restore the natural ecological conditions of both the riparian and aquatic communities of Jones Mill Run by restoring the large woody material component to the stream. This project will improve stream habitat, riparian vegetation development, and help restore the hydrology by assisting the connection of the stream to the floodplain. The woody material will result in a diversity of habitats within the stream. Carefully selected trees will be cut along stream bank into the waterway to improve aquatic life with a target of four 'structures' of multiple pieces of LWM per 100 ft of stream length. This project can be worked on from Jan. 1st to Feb. 28th and from June 16th to Sept. 30th.
- Continue to assist Trout Unlimited and Linn Run State Park with placing lime into Linn Run on Laurel Mt. to improve the water quality.
- Continue to plant apple tree saplings, when available, around edges of wildlife openings. Newly planted apple trees are fenced to prevent unwanted deer browse.
- Continue to mow herbaceous openings throughout the Forbes state forestland to enhance wildlife foraging habitat.
- Continue to monitor and maintain three bat boxes on state forestland to provide brooding areas for bats. Bat numbers have plummeted due to a disease known as White Nose Syndrome.
- Monitor one acre of native wildflowers planted to improve pollinator habitat in an opening in the Mountain Streams Woodcock Habitat Management Area near the Hunter Lane bridge.
- Continue to work with the Pennsylvania Game Commission (PGC) to enhance woodrat habitat around selected rock outcrops in the Torrance Tract.
- Continue to gate the entrances to Barton Cave, Lemon Hole Cave, and Coon Cave on state forestland during the winter months to help protect hibernating bats from disturbance and possible complications with White Nose Syndrome.
- Continue to conduct Timber Stand Improvements (TSI) in selected previously harvested 20–25-year-old state forest stands. We pick out the best quality highly desirable young trees we want to form the next mature forest and cut the lesser quality trees to give the best trees more room and sunlight to grow.
- Continue to work with Laurel Hill State Park to identify and remove unhealthy trees in the park.

- Continue to maintain two deer fence enclosures and three smaller fence cages protecting two rare plants on the Forbes State Forest.
- Erect a deer fence enclosure on the Forbes State Forest to protect a native parasitic shrub that is rare in the eastern Unites States.
- Work with DEP's Bureau of Abandoned Mine Reclamation and Powdermill Nature Reserve operated by the Carnegie Museum of Natural History to renovate and expand the Laurel Run acid mine drainage (AMD) passive treatment system along the headwaters of Laurel Run on the Forbes State Forest in Westmoreland County east of Rt. 381 and north of Felgar Road constructed back in 1997. This will improve water quality and aquatic habitat in Laurel Run.

ROAD AND BRIDGE PROJECTS

- Maintain all roads in District including grading, ditch work and turnouts, culverts and leaf blowing
- Replace two large culverts on Beam Road (FD & C project)
- PSU Dirt and Gravel Road DSA Demo Project on Laurel Summit Road between PW&S intersection and Linn Run Road intersection (includes culvert replacements along with new headwalls and tail walls)
- DSA project on Christner Road between South Wolf Rock Road and Savage Road intersection
- Pave South Wolf Rock Road from Mt. Davis Road intersection to High Point (FD&C project)
- Replace several culverts on South Wolf Rock and Blue Hole Roads
- Rebuild headwalls and tail walls on culverts on Blue Hole and Cole Run Roads
- Grade and compact district joint-use gravel roads
- Hunter access roads opened for rifle bear and deer seasons

PRESCRIBED FIRE

• No prescribed fires are planned on the Forbes State Forest in 2023.

INSECT, DISEASE, AND INVASIVE PLANT TREATMENTS

 Insect and disease monitoring and reporting will continue in 2023 and will focus on the priority list provided by the Division of Forest Health (FH). Our District Forest insect and disease coordinator will forward tree insect and disease reports to our FH Area Specialist for potential investigation and possible follow-up control. Aerial survey flight(s) will be conducted in late June to detect possible problem areas as well.

- We will monitor the 2014 treatment of approximately 111 hemlock (10 acres) trees for possible re-treatment in 2022. This treatment will help stop the invasive Hemlock Woolly Adelgid from killing hemlock trees along the beautiful Shirey Run about one mile east from the intersection of Shirey Run and Township Road (T-972) in the Torrance Tract. This will help protect this critical streamside forest and wildlife habitat.
- In 2023, we will treat several female white ash trees we treated first in 2015, and then again in 2018, to help stop the invasive and exotic Emerald Ash borer from killing white ash in five locations on the Forbes State Forest: South Wolf Rock Road, Owl Lodge Sale, Mt View Look Trail, Brethren Summit Road, and Forbes District Office. These trees must be re-treated every three years to keep them alive. This project protects a very small number of white ash on the Forbes State Forest from dying and creates a future white ash seed source. The Emerald Ash Borer has killed almost all the ash trees across our district, the Commonwealth of PA, and across the entire natural range of ash trees in the United States.
- Other unwanted invasive species such as multi-flora rose, tree-of-heaven, mile-a-minute, Japanese barberry, oriental bittersweet, autumn olive, bush honeysuckle, Japanese knotweed, garlic mustard, common privet, Japanese honeysuckle, Japanese stilt grass, reed canary grass, Canada thistle, bull thistle, crown vetch are all present to some degree on the Forbes State Forest and are continually monitored for future treatment. Mile-a-minute was more recently discovered on the Forbes state forest in the Braddock Division and has the potential to spread rapidly and cause a lot of damage to native vegetation and will be monitored closely. Poison hemlock, Japanese angelica tree, and wavyleaf basket grass are invasive species on our watch list for 2022.
- In spring of 2023, aerial spray approximately 913 acres of oak-dominated forest stands to lessen the impact of spongy moth populations on the Laurel Mt. Division.

NATURAL GAS, OIL, AND OTHER GEOLOGIC RESOURCE DEVELOPMENT

- We will continue to work with Eastern Gas Transmission & Storage, Inc. in the management of their leased North Summit Natural Gas Storage Field located under portions of the Braddock Division. This large gas storage field has many wells and several pipelines on the Forbes State Forest that put gas into and out of the storage field. We are notified of projects for the coming year in late winter.
- Work with natural gas companies to manage several pipelines and shallow natural gas wells on the Forbes State Forest throughout the year. Presently, there are no unconventional (Marcellus) natural gas wells drilled on the Forbes State Forest, nor plans to do so in the foreseeable future.
- Continue to work with Hanson Aggregates Pennsylvania LLC, who operates the limestone quarry near the Torrance Tract, on the large sink hole that formed on the surface, partly on state forest land, due to a partial underground mine collapse in 2020.

• Work with Diversified Gas & Oil Corporation to plug natural gas well #1 on Tract 827 located on Beam Road in the Laurel Mt. Division that has fallen below minimum production standards.

TOWER AND RIGHTS-OF-WAY PROJECTS

- Continue to monitor a 12-acre mile-a-minute (MAM) plant population on the Forbes State
 Forest along the 138 kV Albright-Bethelboro electric line right-a-way just south of Wharton
 Furnace in the Braddock Division. This MAM population was treated by West Penn Power for
 several years with herbicide and, in 2016, weevils were released that eat the MAM to try a more
 natural treatment.
- Work with West Penn Power (WPP) on maintaining the vegetation encroaching onto their 500 kV Hat-Bo and 138 kV Alb-Beth electric line rights-of-way in Fayette County in the Braddock Division. WPP uses targeted herbicide treatments and mechanical equipment (including helicopters) to treat, trim, and remove trees and brush from interfering with the electric line.
- Continue to work with multiple companies who have leases for antenna towers, gas pipeline
 rights-of-way, and electric line rights-of-way on state forest land. We coordinate company
 access and maintenance.
- Continue to monitor the Pennsylvania State University's Department of Meteorology and Atmospheric Science's small weather station on state forest land on Mt. Davis as part of Penn State's Environmental Monitoring Network (EMN).

OPPORTUNITIES FOR PUBLIC ENGAGEMENT

- Conduct 3 organized volunteer trail maintenance days for the LMVG, dates for these are set at the planning meeting held in the spring and relayed to DCNR Conservation Volunteers and groups through the volunteer program. This is an opportunity to engage the public, as well as accomplishing projects using the volunteers.
- Conduct numerous Environmental Education programs and Recreation Programming, dates and descriptions of these programs are advertised in newspapers, Facebook, and a bi-monthly program manual.
- Continue implementation of the Trail Steward Program using volunteers to help assess and maintain adopted trails.
- Service foresters meet with and provide advice to private landowners and communities throughout Allegheny, Westmoreland, Somerset, Fayette, Greene, and Washington counties.
- Pondfield Open House, fall 2023.
- Many opportunities for public engagement are listed as they are planned on our Facebook page.
- We participate in County Fairs, Sportsmen's shows, speaker requests, and many other events. We conduct tours for many groups including Woodland Owner groups. We answer questions via phone and email.

SPECIAL PROJECTS

- Administer and assist with new Shaffer Run latrine installation (FD&C project)
- Administer and assist with High Point Tower rehabilitation (FD&C project)
- Construct new groomer shed at Laurel Ridge State Park (FD & C project)
- Assist with Carroll Cabin rehabilitation project
- Re-Install damaged Smokey Fire Danger sign on Route 40
- Maintain Cemeteries, Helispots, map boards, and deer fences throughout District
- Remove remaining trees from Northwoods pond
- Continue to clear brush from Hunt Springs Pond area
- Herbicide Wharton Furnace vegetation

RESEARCH

- We will continue to monitor our 2013 Butternut planting project south of Sky View Road in the Laurel Mt. Division. We planted one acre with 24 DNA tested 100% pure butternuts and 26 additional suspected 100% pure butternuts provided by our Penn Nursery. These butternuts will be monitored for their resistance to the Butternut canker disease that infects and kills butternut trees.
- We will continue to monitor our 2014 American chestnut planting project east of Tunnel Road in the Laurel Mt. Division. We planted and fenced one acre of the newest American Chestnut hybrids provided by the American Chestnut Foundation and grown by our Penn Nursery. These chestnuts will be monitored for their resistance to the Chestnut Blight that killed millions of American Chestnut trees along the Appalachian Mountains in early 1900 after the fungus was introduced into America.
- We continue to participate in the PA Game Commission's Deer Management Assistance Program (DMAP). We have one DMAP block (544) on the Forbes State Forest where hunters can acquire additional doe tags to help us focus management efforts and reduce deer browse to enhance desirable seedling growth. We collected scientific data from 50 survey VIP plots throughout the Forbes State Forest in 2014 and continue to collect data on ten of those VIP plots each year to monitor and justify if the DMAP blocks are necessary.

- We continue to assist with research of the many historical features found on the Forbes State Forest, such as the Ruane Tract Powdermill, Morrow Jones Cabin, and PW&S Railroad to name a few.
- Collect branch and bud samples (scion) from two healthy white ash trees (referred to as
 'lingering' ash) found on state forest land last year for research why they are not dead along
 with all the other white ash that have been dead for many years in the county and state of
 Pennsylvania.